## **OTHER CISTMS FINDINGS**

CISTMS utilized travel and land use models of INDOT, the Indianapolis MPO and the IUPUI Center for Urban Policy and the Environment. These tools were used to review the system impact of new I-69 traffic through Central Indiana, and a potential new north-south roadway east of SR 9.

# **I-69 through Marion County**

Although CISTMS was not intended to evaluate the extension of I-69 to Evansville, the CISTMS models provided the opportunity to review future travel patterns and service levels with the future I-69 included in the 2025 network. These travel simulations indicated that most I-69 traffic was either destined for the Indianapolis region or would use I-465 to travel through the study area. The need for a new freeway bypass of Indianapolis to serve I-69 traffic was not indicated.

# **North-South Mobility Corridor**

INDOT requested that the travel simulation models used in CISTMS be applied to determine whether a possible new highway facility in the eastern part of the state would draw significant traffic and benefit alternate routes (SR 3, SR 9 and I-465E). The route would link I-69 to I-74, and would be located roughly halfway between SR 9 and SR 3.

The new facility would attract 18,000 to 24,000 vehicles per day, and traffic levels on SR 9 and SR 3 would be reduced by about 18% and 35%, respectively. (The impact on I-465 traffic would be negligible.) Although these diversions are significant, they are not critical for addressing identified problems (except for a section of SR 9 in Pendleton). Overall, this new link does not appear to be warranted. It should be removed from consideration in the next INDOT Plan update.

# **DOCUMENTATION**

A series of reports has been prepared to describe the process and findings of CISTMS. Most are available for review on the web sites of INDOT and the Indianapolis MPO (<a href="https://www.in.gov/dot/projects">www.in.gov/dot/projects</a>, <a href="https://www.indygov.org/indympo">www.indygov.org/indympo</a>). A brief overview of each document developed in CISTMS is provided below.

#### **Peer Cities Report**

This review was undertaken to examine other cities' experiences with "outer belts" located beyond the central business district of an urban area. This was done in two ways: through a broad based literature review, and by a more detailed review of the experience of four "peer" cities.

The selected peer cities were Boston, Houston, Nashville and Charlotte, representing a range of conditions for population, beltway age and beltway distance from downtown. Results were inconclusive except to show that highways are but one of many factors that influence regional development patterns. The report highlights proactive processes being used in the construction of new beltways, such as in Charlotte.

#### **Base Conditions Report**

The Base Conditions Report is a compendium of detailed information regarding existing conditions, operations and plans for each CISTMS study corridor. It provides regional statistics for demographics, transportation systems, commuting patterns and travel characteristics; followed by a corridor-based review of land use, local demographics, physical descriptions and operational characteristics of corridor roadways, and current state and local plans. Aerial and ground photographs are provided to illustrate existing conditions in each corridor.

Some CISTMS recommendations are drawn directly from information provided in the Base Conditions Report. These include relatively low intensity rehabilitation and relatively high intensity reconstruction recommendations (related to physical geometric conditions) and a range of potential strategies to maximize system efficiency (see page 4).

#### **Other Technical Reports**

These documents describe study processes and interim results at a level of detail useful for INDOT, MPO and other technical staff.

Nine County Model Technical Memorandum (June, 2003)

This report describes technical activities and results of testing and preparing the MPO Regional travel simulation model for use in CISTMS.

Transportation & Land Use Assessment Report (Aug, 2004)
This report describes potential outcomes of minimum and maximum change alternatives on regional travel patterns. It identifies potential traffic diversion from existing routes and discusses the interaction of transportation system changes and land development patterns, as indicated by travel demand and land use modeling.

Statewide Mobility Corridor Technical Memo (March, 2005)
This report presents the results of modeling and analyzing a potential new north-south roadway corridor in eastern Indiana (see page 4).

## **Agency Update Presentations**

Process updates and interim findings were presented at regular meetings of the MPO's Policy, Technical and Citizens Advisory Committees. Personal contact was made with over 30 local agency representatives to make them aware of the study and to learn of local projects and plans that might affect the study's recommendations.

# **CISTMS Consultant Project Team:**

Parsons Brinckerhoff Quade & Douglas
HNTB Corporation
Cambridge Systematics, Inc.
IUPUI Center for Urban Policy & the Environment

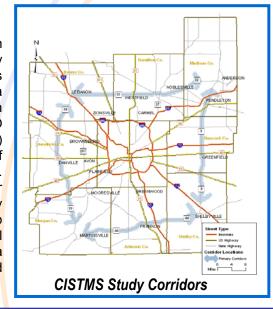
# CISTIMS



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## **BACKGROUND**

The Central Indiana Suburban Transportation and Mobility Study (CISTMS, pronounced "systems") is sponsored by INDOT (the Indiana Department of Transportation) in cooperation with the Indianapolis MPO (Metropolitan Planning Organization) and the Madison County Council of Governments ("Anderson MPO"). CISTMS is primarily a study of four corridors surrounding Marion County (Indianapolis), as shown on the map on the right. This is the final newsletter for the project. It provides a summary of the findings and recommendations for the study.



# **RECOMMENDATIONS**

The primary purpose of CISTMS is to identify future needs within the four study corridors. The study also evaluates an outer belt, reviews system impacts of routing I-69 through the area, and identifies potential benefits of a new North-South Mobility Corridor.

Corridor recommendations are summarized on pages 2 and 3. I-69 and the North-South Mobility Corridor recommendations are presented on page 4. Outer belt findings are presented below. These recommendations are intended as inputs to future planning activities of INDOT and responsible local agencies.

# **Outer Freeway Belt?**

For the most part. CISTMS models indicate that a full outer freeway belt would not divert significant volumes of traffic from other congested facilities. Nor would it stimulate significant land use changes in the corridors served.

This is not surprising given the high volume of <u>local</u> traffic on the existing Interstate System and the location of the proposed outer belt with respect to the region's urban fringe. For the most part, existing trip patterns (and those forecasted to 2025) would not be served by an outer belt. An exception

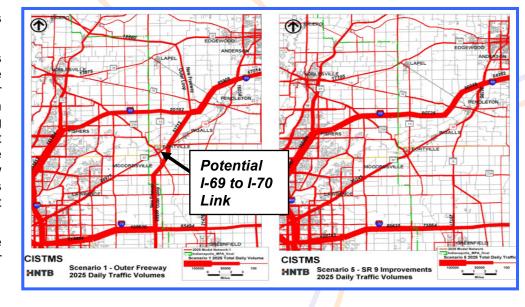
is the part of the outer belt that would link I-69 to I-70 in the east corridor, as discussed below.

Travel simulation modeling results indicate that additional study may be warranted for the portion of the outer belt that would link I-69 with I-70 in the northeast. Traffic approaching Indianapolis on I-69 would split about evenly just west of Anderson to use this link, as shown by traffic flow maps on the right. Traffic volumes are depicted with this link on the left and without it on the right.

This section drew considerably more traffic than other portions of the outer belt (74,000 vehicles/day). It would

divert traffic from several congested roadways in the region, including I-69, I-465 (east leg) and SR 9. The greatest traffic reduction would be on SR 9 through Pendleton (55% lower). If this link was constructed, 2025 daily traffic volumes on I-70 east of I-465 would increase by about 15%.

The key question is whether the cost and impact of constructing this new 12-mile roadway (and most likely widening I-70 to I-465) would be offset by reductions in the currently planned projects on I-465 and I-69 in the northeast.



Central Indiana Suburban Transportation and Mobility Study



# WESTERN CORRIDOR

#### **Summary of Findings & Recommendations:**

- 1 The most significant problem is the lack of functional connectivity of SR 267 south of Plainfield.
- (2) SR 267 should be realigned to the east of Mooresville to provide a direct link between I-70 and SR 67, consistent with long range plans of INDOT and the MPO.
- (3) Added travel lanes should be provided on SR 39 between SR 37 and SR 67 through Martinsville, in accordance with current INDOT plans.
- (4) SR 39 should be reconstructed or rehabilitated, with traffic engineering improvements at selected locations, between SR 67 and the Hendricks/Boone County line.
- 5 SR 267 north of Plainfield and SR 39 south of Lebanon will be adequate to meet future needs, with traffic engineering improvements over time as warranted.
- $\binom{6}{1}$  The need for a Lebanon bypass for SR 39 is not

# SOUTHERN CORRIDOR

## **Summary of Findings & Recommendations:**

- An optional route for SR 44 through Franklin should be developed, utilizing Eastview Drive and an extension of existing CR 200N to link with SR 144 west of the city.
  - should be re-designated as a state highway to provide a continuous corridor with existing SR 144. Geometric improvements, including added travel lanes. on SR 144 should be provided between Franklin and Mooresville.

CR 144 in Johnson County

- Current plans to rehabilitate and should be implemented.
- The capacity of other sections of SR 44 will be adequate, traffic engineering improvements at selected

# NORTHERN CORRIDOR

# **Summary of Findings & Recommendations:**

- 1) The most significant problem is the poor level of service on SR 32 through Noblesville.
- Roadways parallel to SR 32 should be improved to and through Noblesville, including 161st Street and a new White River bridge at Pleasant Street, as shown in local plans.
- Added travel lanes will be needed on SR 32 through Westfield and between Westfield and Noblesville.
- SR 32 reconstruction plans are warranted in all three counties. including added travel lanes at selected locations
- (5) The need for a Lebanon bypass for SR 32 is not indicated.

# 19 SHERIDAM CICERO E 236TH ST 47 NOBLESVILLE LEBANON 238 146TH ST WHITESTOWN PENDLETON 131st ST ZIONSVILLE CARMEL 116TH ST 37 INDIANAPOLIS

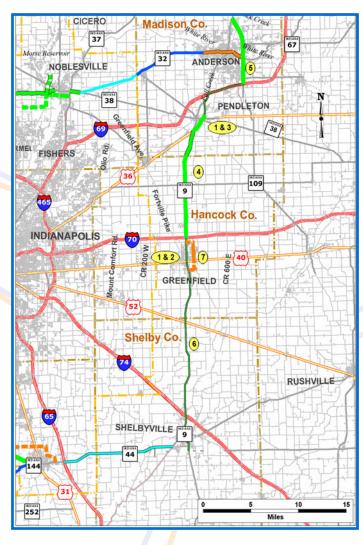
#### **LEGEND - ALL MAPS**



# **EASTERN CORRIDOR**

# **Summary of Findings & Recommendations:**

- The most significant problem is the level of service of SR 9 through Greenfield and Pendleton.
- Local arterial routes should be improved parallel to SR 9 through Greenfield.
- Traffic engineering improvements and transportation demand management actions should be implemented in Pendleton to optimize traffic flow conditions.
- Added travel lanes should be planned for to meet long term needs on SR 9 between Greenfield and Pendleton.
- Added travel lanes should be provided on portions of SR 9 in Anderson and south to Pendleton.
- (6) SR 9 in Shelby County will be adequate to meet future needs, with traffic engineering improvements over time as warranted.
- 7 The need for a Greenfield bypass for SR 9 is not indicated. (This is consistent with a separate INDOT bypass study for SR 9.)



- The most significant problems are the level of service of SR 44 through Franklin and poor geometric conditions on SR 44 and SR 144 west of Franklin.



SR 44 between Shelbyville and Franklin are warranted